AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): A vocal connection system between humans and animals, particularly domestic animals, comprising:

- a matrix of sensors (2) to be positioned on the animal, in particular on its head and/or its neck, for converting stimuli detected on the body of ~~the~~ the animal into first electric signals (4) which are indicative of a status of the animal, in terms of feelings, events, actions or behaviours,

- processing means (3) associated with the matrix of sensors (2), including memory means (5) in which human vocal messages are recorded corresponding to various status of the animal,

- a loudspeaker (6) operatively connected to the processing means (3),

said processing means (3) being provided for receiving the first signals (4) coming from the sensors (2) and for activating said loudspeaker (6) in order to emit a human vocal message selected in said memory means (5), depending upon the received first signals (4), thus simulating the possibility of speaking for the animal,

the system further comprising

- speech~~vocal~~ recognition means (8) for sending~~able to send~~ second signals (10) to the processing means (3), which are representative of the contents of vocal messages (9), and

- stimuli generating means (11) operatively associated to the body of the animal, in particular to its head and/or neck, which receive said second signals (10) from the processing

means (3) and send corresponding stimuli to the animal'sanimal brain, so as to induce the animal to take determined actions or perceive determined feelings.

2. (currently amended): System according to claim 1, wherein said processing means (3) are programmed to provide an interactive self-learning method, where the user (7) can correct or confirm the vocal messages emitted by said loudspeaker (6), by his vocal messages (9).

3. (currently amended): System according to claim 1, wherein the matrix of sensors (2), the processing means (3), the loudspeaker (6), the speechvocal recognition means (8) and the stimuli generating means (11) are integrated in a collar-(C).

4. (currently amended): System according to claim 1, wherein the speechvocal recognition means (8) are used as supplementary means in addition to said sensors (2) in order to improve the interpretation of the status of the animal as detected by said sensors (2).

5. (previously presented): System according to claim 1, wherein the system develops in time a language proper of the animal, by means of an evolutive process, through the hearing by the animal of the vocalization which the animal generates in association with its reactions to the environment.

6. (previously presented): System according to claim 1, wherein sensors (2) are provided to detect stimuli of different origin coming from the animal.

7. (previously presented): System according to claim 6, wherein there are provided first electrodes to detect the electric activity of the animal brain and second electrodes to detect the electric activity of muscles and/or nerves of the animal.

8. (previously presented): System according to claim 1, wherein at least first and second sensors (2) are positioned just below respective ears of the animal, or in any case close to the occipital cortex of the animal, and further sensors (2) are arranged around the neck of the animal.

9. (previously presented): System according to claim 1, wherein a neural network control system is implemented in said processing means (3).

10. (currently amended): A method for allowing vocal connection between humans and animals, particularly domestic animals, comprising the following steps:

i) stimuli which are indicative of a status of an animal, in terms of feelings, events, actions, thoughts, wishes or behaviours, are detected on the body of the animal;

ii) the detected stimuli are converted into first ~~10~~ electric signals (4), which are sent to processing means (3);

iii) the processing means (3) selects a stored human-type vocal message corresponding to received first electric signals (4) and activates as a consequence a loudspeaker (6) for emitting a selected human-type vocal message, thus simulating the possibility of speaking for the animal;

iv) speech~~vocal~~ recognition means (8) for receiving human-type vocal messages (9) and for sending respective second electric signals (10) to the processing means (3);

v) the processing means (3) generates, in function of the type of the received second electric signals, stimuli (11) which are sent to the brain of the animal, so as to induce the latter to take determined actions or perceive determined feelings,

whereby the animal is brought to develop its own language in time with an evolutive process, through an interactive loop comprising steps i) to v), including the hearing by the animal of the vocalizations it generates, as per steps i) to iii), in association with its reactions to the environment.